Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application. Please cancel Claims 1-15 and add new Claims 16-76 as follows:

Listing of Claims:

1-15 (Cancelled)

16. (New) A process for forming an insulating film on the surface of a substrate for an electronic device, comprising:

a first step of cleaning the substrate with plasma based on a first process gas comprising at least a rare gas; and

a second step of oxidizing the substrate with plasma based on a second process gas comprising at least a rare gas and oxygen, to thereby from an oxide film thereon;

wherein the first and second steps are conducted under the same operation principle.

17. (New) A process for forming an insulating film according to claim 16, wherein the first process gas comprises hydrogen gas.

18. (New) A process for forming an insulating film according to claim 16, wherein the first step is conducted at a pressure of 7-133 Pa.

19. (New) A process for forming an insulating film according to claim 16, wherein the first and second steps are conducted in the same processing chamber or in different processing chambers under the same operation principle.

20. (New) A process for forming an insulating film according to claim 16, which further comprises a third step to be conducted after the second step, of nitriding the oxide film with plasma based on a third process gas comprising at least a rare gas and nitrogen.

21. (New) A process for forming an insulating film according to claim 20, which further comprises a fourth step to be conducted after the third step, of treating the oxide film with plasma based on a fourth process gas comprising hydrogen gas.

22. (New) A process for forming an insulating film according to claim 16, which further comprises a fifth step to be conducted after the second step, of treating the oxide film with plasma based on a fifth process gas comprising hydrogen gas.

23. (New) A process for forming an insulating film according to claim 21, which further comprises a step to be conducted after the fourth step, of forming a High-k film.

24. (New) A process for forming an insulating film according to claim 22, which further comprises a step to be conducted after the fifth step, of forming a High-k film.

25. (New) A process for forming an insulating film on the surface of a substrate for electronic device, comprising:

a first step of cleaning the substrate with plasma based on a first process gas comprising at least a rare gas; and

a second step of nitriding the substrate with plasma based on a second process gas comprising at least a rare and nitrogen, to thereby from a nitride film thereon;

wherein the first and second steps are conducted under the same operation principle.

26. (New) A process for forming an insulating film according to claim 25, wherein the first process gas comprises hydrogen gas.

27. (New) A process for forming an insulating film according to claim 25, wherein the first step is conducted at a pressure of 7-133 Pa.

28. (New) A process for forming an insulating film according to claim 25, wherein the first and second steps are conducted in the same processing chamber or in different processing chambers under the same operation principle.

29. (New) A process for forming an insulating film according to claim 25, which further comprises a third step to be conducted after the second step, of oxidizing the nitride film with plasma based on a third process gas comprising at least a rare gas and oxygen.

30. (New) A process for forming an insulating film according to claim 29, which further comprises a fourth step to be conducted after the third step, of treating the nitride film with plasma based on a fourth process gas comprising hydrogen gas.

31. (New) A process for forming an insulating film according to claim 25, which further comprises a fifth step to be conducted after the second step, of treating the nitride film with plasma based on a fifth process gas comprising hydrogen gas.

32. (New) A process for forming an insulating film according to claim 30, which further comprises a step to be conducted after the fourth step, of forming a High-k film.

33. (New) A process for forming an insulating film according to claim 31, which further comprises a step to be conducted after the fifth step, of forming a High-k film.

34. (New) A process for forming an insulating film according to claim 21 wherein the hydrogen plasma processing is conducted at a pressure of 3133 Pa.

35. (New) A process for forming an insulating film according to claim 22 wherein the hydrogen plasma processing is conducted at a pressure of 3133 Pa.

36. (New) A process for forming an insulating film according to claim 30 wherein the hydrogen plasma processing is conducted at a pressure of 3133 Pa.

37. (New) A process for forming an insulating film according to claim 31 wherein the hydrogen plasma processing is conducted at a pressure of 3133 Pa.

38. (New) A process for forming an insulating film according to claim 34, wherein the hydrogen plasma processing is conducted at a rate gas flow rate of 500-2000 sccm, and a hydrogen gas flow rate of 4-500 sccm.

39. (New) A process for forming an insulating film according to claim 35, wherein the hydrogen plasma processing is conducted at a rate gas flow rate of 500-2000 sccm, and a hydrogen gas flow rate of 4-500 sccm.

40. (New) A process for forming an insulating film according to claim 36, wherein the hydrogen plasma processing is conducted at a rate gas flow rate of 500-2000 sccm, and a hydrogen gas flow rate of 4-500 sccm.

41. (New) A process for forming an insulating film according to claim 37, wherein the hydrogen plasma processing is conducted at a rate gas flow rate of 500-2000 sccm, and a hydrogen gas flow rate of 4-500 sccm.

42. (New) A process for forming an insulating film according to claim 20, wherein the third step is conducted in a processing chamber that is the same as or different from the processing chamber wherein the first and second steps are conducted.

43. (New) A process for forming an insulating film according to claim 21 wherein the fourth step is conducted in a processing chamber that is the same as or different from the processing chamber wherein the first and second steps are conducted.

44. (New) A process for forming an insulating film according to claim 22 wherein the fifth step is conducted in a processing chamber that is the same as or different from the processing chamber wherein the first and second steps are conducted.

45. (New) A process for forming an insulating film according to claim 29, wherein the third step is conducted in a processing chamber that is the same as or different from the processing chamber wherein the first and second steps are conducted.

46. (New) A process for forming an insulating film according to claim 30, wherein the fourth step is conducted in a processing chamber that is the same as or different from the processing chamber wherein the first and second steps are conducted.

47. (New) A process for forming an insulating film according to claim 31, wherein the fifth step is conducted in a processing chamber that is the same as or different from the processing chamber wherein the first and second steps are conducted.

48. (New) A process for forming an insulating film according to claim 16, wherein the plasma has an electron temperature of 0.5-2 eV.

49. (New) A process for forming an insulating film according to claim 25, wherein the plasma has an electron temperature of 0.5-2 eV.

50. (New) A process for forming an insulating film according to claim 48, wherein the plasma has a plasma density of $1x10^{10}$ to $5x10^{12}/cm^3$.

51. (New) A process for forming an insulating film according to claim 49, wherein the plasma has a plasma density of $1x10^{10}$ to $5x10^{12}/cm^3$.

52. (New) A process for forming an insulating film according to claim 16, wherein the plasma is generated by using a plane antenna member having a plurality of slots.

53. (New) A process for forming an insulating film according to claim 25, wherein the plasma is generated by using a plane antenna member having a plurality of slots.

54. (New) A process for forming an insulating film according to claim 52, wherein the plasma is generated using microwave irradiation.

55. (New) A process for forming an insulating film according to claim 53, wherein the plasma is generated using microwave irradiation.

56. (New) A process for forming an insulating film according to claim 23, wherein the High-k film comprises at least one material selected from the group consisting of Al_2O_3, ZrO_2, HfO_2, Ta_2O_5, silicates and aluminates.

57. (New) A process for forming an insulating film according to claim 24, wherein the High-k film comprises at least one material selected from the group consisting of Al_2O_3, ZrO_2, HfO_2, Ta_2O_5, silicates and aluminates.

58. (New) A process for forming an insulating film according to claim 32, wherein the High-k film comprises at least one material selected from the group consisting of Al_2O_3, ZrO_2, HfO_2, Ta_2O_5, silicates and aluminates.

59. (New) A process for forming an insulating film according to claim 33, wherein the High-k film comprises at least one material selected from the group consisting of Al_2O_3, ZrO_2, HfO_2, Ta_2O_5, silicates and aluminates.

60. (New) A process for forming an insulating film according to claim 56, wherein the silicate is ZrSiO or HfSiO or the aluminate is ZrAlO.

61. (New) A process for forming an insulating film according to claim 57, wherein the silicate is ZrSiO or HfSiO or the aluminate is ZrAlO.

62. (New) A process for forming an insulating film according to claim 58, wherein the silicate is ZrSiO or HfSiO or the aluminate is ZrAlO.

63. (New) A process for forming an insulating film according to claim 59, wherein the silicate is ZrSiO or HfSiO or the aluminate is ZrAlO.

64. (New) A process for forming an insulating film according to claim 16 wherein the insulating film is a gate insulator.

65. (New) A process for forming an insulating film according to claim 25 wherein the insulating film is a gate insulator.

66. (New) A semiconductor device manufacturing system for conducting a process for forming an insulating film on the surface of a substrate for an electronic device, the system comprising:

a cassette containing a substrate;

a transportation chamber for transporting the substrate;

a first arm for disposing the substrate in the transportation chamber;

a plurality of plasma processing units for conducting treatments on the substrate, which is to be introduced into the plasma processing unit via the arm connected to the transportation chamber;

a load lock unit for conducting the communication and isolation between the cassette and the transportation chamber via a second arm;

wherein the plasma processing unit conducts a process comprising a first step of cleaning the substrate with plasma based on a first process gas comprising at least a rare gas; and a second step of oxidizing or nitriding the substrate with plasma based on a second process gas, to thereby from an oxide or nitride film thereon; wherein the first and second steps are conducted under the same operation principle.

67. (New) A semiconductor device manufacturing system according to claim 66, which further comprises a heating unit for operating heating treatment.

68. (New) A semiconductor device manufacturing system according to claim 66, which further comprises a heating reaction furnace for conducting heating treatment on the substrate.

69. (New) A semiconductor device manufacturing system according to claim 66, wherein any of the plasma processing unit conducts a fourth step of treating the insulating film with plasma based on a fourth process gas comprising hydrogen gas.

70. (New) A semiconductor device manufacturing system according to claim 66, wherein the heating unit conducts a step of forming a High-k film.

71. (New) A process for forming an insulating film according to claim 16 wherein the substrate is subjected to wet cleaning prior to the plasma cleaning.

72. (New) A process for forming an insulating film according to claim 25 wherein the substrate is subjected to wet cleaning prior to the plasma cleaning.